

AMENDMENTS TO THE DRAWINGS

The attached sheet of drawings includes changes to Figure 4, adding two curved lines which were drawn according to the description (pages 6-7), by concavely and convexly curving the straight line (K) in the original drawing Figure 4.

Attachment: Replacement sheet

REMARKS

Status of the claims

The Office Action of October 4, 2005 presents the examination of claims 1-6, 8, and 10-15, claims 7, 9 and 16 being withdrawn from consideration following restriction of the claims. Claim 8 is indicated as allowable if rewritten into independent form. The present paper amends claims 1-4 and 6-15, and adds claims 17.

Claim 8 is rewritten into independent form, incorporating the recitations of claim 1 from which it was dependent. Claim 8 is thus believed to be allowable. New claim 17 depends from allowable claim 8, and thus should also be allowable. The recitations of new claim 17 have been previously considered by the Examiner in, e.g. previous claim 1.

Entry of the amendments to the application is respectfully requested, as no new issue is presented for consideration by the Examiner. This amendment also either places the claims into condition for allowance, or at least substantially reduces the issues for appeal.

Claim numbering

The Examiner has noticed the misnumbering of the new claims presented in Applicant's paper of November 23, 2004. Applicants acknowledge the renumbering of the claims, which is reflected in the listing of the claims in the present paper.

Drawings

The Examiner objects to the drawings, indicating that at least one feature specified in the claims is absent. In particular, the Examiner states that the feature of claim 8, that the front portion having a rear edge convexly curved toward the club face, is not illustrated and therefore this feature must be shown in the drawings or removed from claim 8.

Fig.4 is therefore amended by adding two curved lines that are drawn, according to the description at, *e.g.* page 7, lines 2-6 as concave and convex curves (toward the club face) as alternatives to the straight line K originally presented in Fig.4. No new matter is added by this amendment to the drawings. .

Specification

The specification amendments made above conform the description to the amended Figure 4.

Objection for double patenting

Claim 11 is objected to as substantially (in fact identically) duplicative of claim 10. The dependence of claim 11 is changed from claim 1 to claim 17, thus obviating this objection.

Rejection under 35 U.S.C. § 112, second paragraph

Claims 8 and 10-15 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite in the recitation of a “front portion”; the term “portion” lacking antecedent basis. These claims are amended to recite “front part” as suggested by the Examiner’s (correct) interpretation.

Rejection over prior art

Claims 1-6 and 10-15 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Murphy et al. ‘378 in view of Anderson ‘916, Helmstetter ‘728, Hasebe ‘337 and Sampei JP ‘982. This rejection is respectfully traversed. Reconsideration and withdrawal thereof are requested.

Applicants submit that the Examiner fails to properly establish *prima facie* obviousness of the present invention. In particular, one of ordinary skill in the art would not combine the references cited in the manner of the Examiner as the requisite motivation to do so is lacking.

Alternatively, should the combination be made, the result would not be invention as presently claimed.

It is plain that the Examiner has used the instant claims as a template upon which to assemble pieces of prior art that recite individual features of the invention, thereby asserting that each feature of the invention is known in the art. This is apparent first from the number of references (five) needed to establish the rejection.

Next, the Examiner is taking pieces of art that describe golf clubs of a wide variety of materials, then picking and choosing among the various elements of the clubs described in the references to find the ones that fit the present invention. This approach is contrary to the requirement that the Examiner must consider the teachings of the references as a whole and is further evidence of lack of motivation to combine them in the manner the Examiner has done. Thus, Murphy, who describes a fully composite hollow club head, is combined with Anderson, who describes a forged iron, to assert that it is obvious to provide a golf club with a metal face. Why would the skilled artisan look to the design of solid, forged iron clubs for an element of a hollow wood club? Applicants submit that there is no motivation to do so.

Next, the Examiner introduces Helmstetter for the feature of the invention of a large area sole plate. However, the Examiner should consider that the sole portion of the instantly claimed golf club is made from a metal material. In contrast, the sole of the club described by Helmstetter is made from a composite material and covered with a metal "sole plate" (see col. 3, lines 35-38 and lines 52-55). The Examiner asserts that the size of the sole plate is designed to optimize the moment of inertia of the golf club, but he fails to consider that the moment of inertia would be significantly different, and thus the size of the sole plate would be significantly different, if the sole of the club head were made from metal as in the instant invention rather than of a composite as described by Helmstetter.

The Hasebe and Sanpei references are cited for features related to the thickness of the sole part and the relationship of the thickness of the front part of the sole to the thickness of the

back part of the sole. The Examiner acknowledges that Hasebe is silent about the actual thickness of the sole, and Sanpei is therefore cited for this value.

Thus, taken together, the references describe a club head having a hollow composite driver body with the face of a forged iron, the driver body having a sole that is a composite material with a sole plate on the bottom, and having a combined thickness of the composite and metal of the sole of 1.5 mm at the front portion and from 0.75 to 1.5 mm in the back portion of the dual material sole. This is not the present invention that is described in claim 1.

With respect to claims 10-14, the Examiner indicates that Applicant has not explained the criticality of placing the line K joining the front and back portions of the sole at the mid-line between the face and the back of the club head. At page 5, the specification describes that a problem solved by the invention is maintaining of the peak frequency of the sound of the strike of a ball in a preferred high frequency band. It is further described that this is accomplished by carefully arranging the thickness distribution in the sole of the club head. The location of the joining of the front and back portions of the sole, with their distinct differences in thickness, is an integral part of this arrangement of the thickness distribution.

Thus, with respect to claims 10-14, Applicant submits that the Examiner fails to establish *prima facie* obviousness of claims 10-14, as the combined references cited by the Examiner are silent upon the feature that the line joining the essentially constant thickness front part of the sole to the thinner, back part of the sole. Accordingly, at least these claims should be found free of the instant rejection.

The present application well-describes and claims patentable subject matter. The favorable action of allowance of the pending claims and passage of the application to issue is respectfully requested.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Mark J. Nuell (Reg. No. 36,623) at

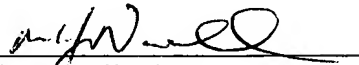
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After Final Office Action of October 4, 2005

Docket No.: 0229-0765P

the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

Dated: February 3, 2006

Respectfully submitted,

By 

Mark J. Cuell, Ph.D.

Registration No.: 36,623

BIRCH, STEWART, KOLASCH & BIRCH, LLP

8110 Gatehouse Road

Suite 100 East

P.O. Box 747

Falls Church, Virginia 22040-0747

(703) 205-8000

Attorney for Applicant

Attachment: Replacement Sheet of the drawings (1 sheet)